



UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/369,767	08/06/99	NEUMANN	H 10191/1146

KENYON & KENYON
ONE BROADWAY
NEW YORK NY 10004

IM52/0327

EXAMINER

OLSEN, K

ART UNIT	PAPER NUMBER
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1744

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DATE MAILED:

03/27/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Advisory ActionApplication No.
09/369,767Applicant(s)
NeumannExaminer
Kaj OlsenGroup Art Unit
1744

THE PERIOD FOR RESPONSE: [check only a) or b)]

- a) ☒ expires 3 months from the mailing date of the final rejection.
- b) ☐ expires either three months from the mailing date of the final rejection, or on the mailing date of this Advisory Action, whichever is later. In no event, however, will the statutory period for the response expire later than six months from the date of the final rejection.

Any extension of time must be obtained by filing a petition under 37 CFR 1.136(a), the proposed response and the appropriate fee. The date on which the response, the petition, and the fee have been filed is the date of the response and also the date for the purposes of determining the period of extension and the corresponding amount of the fee. Any extension fee pursuant to 37 CFR 1.17 will be calculated from the date of the originally set shortened statutory period for response or as set forth in b) above.

- ☐ Appellant's Brief is due two months from the date of the Notice of Appeal filed on _____ (or within any period for response set forth above, whichever is later). See 37 CFR 1.191(d) and 37 CFR 1.192(a).

Applicant's response to the final rejection, filed on Mar 5, 2001 has been considered with the following effect, but is NOT deemed to place the application in condition for allowance:

- ☒ The proposed amendment(s):
- ☒ will be entered upon filing of a Notice of Appeal and an Appeal Brief.
- ☐ will not be entered because:
- ☐ they raise new issues that would require further consideration and/or search. (See note below).
 - ☐ they raise the issue of new matter. (See note below).
 - ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal.
 - ☐ they present additional claims without cancelling a corresponding number of finally rejected claims.

NOTE: _____

- ☐ Applicant's response has overcome the following rejection(s): _____

- ☐ Newly proposed or amended claims _____ would be allowable if submitted in a separate, timely filed amendment cancelling the non-allowable claims.

- ☒ The affidavit, exhibit or request for reconsideration has been considered but does NOT place the application in condition for allowance because:
see attached sheet

- ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

- ☒ For purposes of Appeal, the status of the claims is as follows (see attached written explanation, if any):

Claims allowed: _____

Claims objected to: _____

Claims rejected: 1-13

- ☒ The proposed drawing correction filed on Oct 20, 2000 ☒ has ☐ has not been approved by the Examiner.

- ☐ Note the attached Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

- ☒ Other a summary or the interview of 2-8-01 is included.

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 3-5-2001 have been fully considered but they are not persuasive. With respect to the argument of Kato (or Kato in view of Logothetis), applicant argues Kato fails to teach the use of an electrode with has a positive voltage and is coupled to ground. The examiner can find nothing in the claims concerning a positive voltage. However, as the examiner has argued in the previous office actions, the electrode 24 of fig. 7 would be positively polarized with respect to electrode 22 (consequently, electrode 22 would be negatively polarized with respect to electrode 24 in view of the EMF induced on the electrodes because of the difference in oxygen levels "seen" by each electrode as discussed previously. If applicant believes the examiner is in error with his argument, applicant should clearly set forth how the examiner is in error. With respect to the grounding of electrode 38b, the examiner has argued it is notorious well known to use ground as a negative terminal for a voltage source such as the voltage source to the heater 36 of Kato. Applicant also continues to argue with respect to Kato and all the references utilized that the prior art fails to teach "coacting" electrodes without explaining how the term "coacting" breathes patentable subject matter into the instant invention. The electrodes of the instant invention appear to be as "coacting" as the electrodes of the prior art (i.e. the electrodes cooperate to provide a measure of oxygen into gas environment).

Clarification is requested.

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With respect to the use of Logothetis, applicant argues the reference fails to teach a number of elements of the claims. However, all the elements of the claims in question were taught by Kato *except* for what Logothetis was utilized to teach. Any failings of the reference Logothetis ignores the fact that Logothetis is being utilized as a secondary reference. Applicant's point concerning Logothetis's use of a load resistor is not understood. The examiner presumes the applicant would also utilize a load resistor between the two electrodes for the measurement of current and to complete circuit loop (absence of a load resistor would leave the circuit open and would not provide a means for measuring current). At any rate it is unclear how the load resistor of Logothetis teaches away from the subject matter *of the claims*. Clarification is requested. Finally with respect to Kato and Logothetis, applicant argues the combination of the references would result in a heating element between the two electrodes. It is unclear how the applicant came to this conclusion considering neither Kato nor Logothetis teach any embodiments having a heater in between the electrodes. Clarification is requested.

With respect to Stahl, applicant again argues the reference fails to teach both "coacting" electrodes and the grounding of the positive electrode. These issues were largely addressed above with respect to Kato and will not be reiterated here. With respect to the positive voltage (although not in the claims), the potential of electrode 29 would be positive with respect to electrode 27 when the oxygen concentration in the gas being measured is greater than the oxygen concentration in the reference space thereby reading on the language of the claims. Applicant

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continues to argue these elements are not taught without ever addressing why the examiner is in error with his logic. Clarification is requested.

With respect to Murase, applicant argues Murase fails to teach a second electrode having a positive voltage (again not claimed) being coupled to ground. This is clear contradiction with what the examiner has shown in the previous office actions. Electrode 30 is clearly grounded (fig. 1) and is clearly positive with respect to electrode 32 (in view of the negative potential provided to electrode 32 by element 40 which has its positive terminal grounded). How the applicant has come to the conclusion that this is not shown by the reference is not understood. Clarification is requested. Applicant also continues to argue that heating means could be a furnace. This issue was dealt with in the final rejection and will not be reiterated here absent any new argument as to why the examiner is in error with his arguments.

With respect to the rejection of claim 11 with Murase in view of Kato, applicant argues the combination of references would result in an device which would not read on the claims. Applicant appears to come to this conclusion by incorporating elements of Kato into Murase which were not relied upon. For this rejection, Kato is merely being utilized to show to teach the embedding of the heater element into an insulating element. The other aspects of Kato were not incorporated and these points are moot. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

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references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Kato shows how sensor heating elements are typically embedding in an insulating layer (Kato is only one of a myriad of references which would set forth this arrangement). It would have been obvious to one of ordinary skill in the art at the time the invention was being made that one would look to prior art sensors in order to demonstrate successful implementation of heaters in the sensor.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaj Olsen whose telephone number is (703) 305-0506.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Mr. Robert Warden, can be reached at (703) 308-2920.

When filing a fax in Group 1700, please indicate in the header "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communications with the PTO that are not for entry into the file of this application. This will expedite processing of your papers. The fax number for this Group is (703) 305-7719.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, whose telephone number is (703) 308-0661.

Kaj K. Olsen, Ph.D.

A handwritten signature in black ink, appearing to read 'Kaj Olsen', with a long horizontal flourish extending to the right.

Patent Examiner

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A handwritten signature in black ink, appearing to read 'Robert J. Warden, Sr.', with a long horizontal flourish extending to the right.

ROBERT J. WARDEN, SR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700